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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,092	03/23/2004	Tatsuya Mitsugi	1163-0500PUS1	1861

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EXAMINER
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NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,092	<b>Applicant(s)</b> MITSUGI, TATSUYA	
	<b>Examiner</b> Chau Nguyen	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Amendments filed 09/12/2006 have been entered. Claims 1-21 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao, US Patent No. 6,581,056, and further in view of Justice et al. (Justice), US Patent Application Publication No. US 2003/0023634.

4. As to independent claim 1, Rao discloses a document information processing apparatus comprising: a plain document input unit for inputting a plain document;

a dictionary storage unit for storing a dictionary used for form element analysis and syntactic analysis (col. 5, line 60 – col. 6, line 36: statistical content analysis engines for performing content analysis);

a form element analyzer for performing a form element analysis on the plain document inputted from said plain document input unit by using the dictionary stored in said dictionary storage unit so as to decompose the plain document into tokens (col. 5,

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line 60 – col. 6, line 36: the tokenizer extracts tokens by parsing the text of a document and generating a token for each contiguous sequence of characters, e.g. a word);

a syntax analyzer for analyzing a part of speech of each of the tokens obtained by said form element analyzer based on a syntax of said plain document (col. 6, lines 18-36: the filters perform functions as generating part of speech tagging or phrase spotting on the tokens);

However, Rao does not explicitly disclose generate a structured document containing meaningful words; a data storage unit for storing data used for a markup process; an element refinement processing unit for performing the markup process of reading each of the meaningful words in the structured document and automatically adding content to the structured document in association with at least one of the meaningful words in order to generate a markup document, said added content including data read from said data storage unit or data generated according to a determined attribute of the at least one of the meaningful words; and a markup document output unit for outputting the markup document generated by said element refinement processing unit.

Justice discloses a text file contains content elements such as title, author, release date, article body, and other elements distinguishable in a similar manner (pages 2-3, paragraph [0028]). Justice also discloses transformation processor (element refinement processing unit) for transforming content items (meaningful words) in a text file into markup file that includes metadata such as tags that are associated with a number of content elements (Figs. 2-3 and pages 1-2, paragraphs [0016]-[0018]),

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and the heuristics markup file provides a relative position within the text file and includes a number of data type tags that are associated with a respective content element (page 3, paragraph [0031]). In addition, Justice discloses once the markup file is created, then it may be transmitted back to client via the network or to some other entity on the network (page 3, paragraph [0035]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Justice and Rao to include generate a structured document containing meaningful words; a data storage unit for storing data used for a markup process; an element refinement processing unit for performing the associated with each markup process of reading each of the meaningful words in the structured document and automatically adding content to the structured document in association with at least one of the meaningful words in order to generate a markup document, said added content including data read from said data storage unit or data generated according to a determined attribute of the at least one of the meaningful words; and a markup document output unit for outputting the markup document generated by said element refinement processing unit. Justice suggests that converting the text file to markup file since the markup file is more searchable and useful to public users.

5. As to dependent claim 2, Rao and Justice disclose a text document input unit for generating a plain text document and sending the generated plain text document to said plain document input unit (Justice, page 2, paragraph [0024] and page 3, paragraph

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[0032], a user of the client 106 using user input devices generates content items such as publishing content that is embodied in the form of the text file).

6. As to dependent claim 3, Rao and Justice disclose an external communication input unit for inputting plain document from outside said apparatus via a communication device, and sends the inputted plain document to said plain document input unit (Justice, page 2, paragraph [0024] and page 3, paragraph [0032], a user of the client 106 using user input devices generates content items such as publishing content that is embodied in the form of the text file).

7. As to dependent claim 6, Rao and Justice disclose an external communication output unit for sending the markup document from said markup document output unit to an external device (Justice, page 3, paragraph [0035]).

8. As to dependent claim 7, Rao and Justice disclose an external communication output unit for sending the markup document from said markup document output unit to external device (Justice, page 3, paragraph [0035]).

9. As to dependent claim 17, Rao and Justice disclose the element refinement processing unit determines an attribute of the at least one meaningful word, and adds to markup tag to the structured document identifying the attribute, the added content being associated with the markup tag (Justice, page 3, paragraph [0036] and Figure 5: the

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user create the simple heuristics markup file that describes the relative location of the content elements such as tag <dateline> for date, <title> for title, <copyright> for "copyright 2001 writers syndicate, Inc" line).

10. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao and Justice as discussed in claims 1-3, 6-7 and 17 above, and further in view of Chen et al. (Chen), US Patent No. 7,020,685.

11. As to dependent claim 4, Rao and Justice, however, do not explicitly disclose an external communication input unit for inputting a document on which a markup process has been performed from outside said apparatus via a communication, and a markup document analyzer for analyzing and removing markup from the document inputted by said external communication input so as to generate a plain document and to be sent to said markup document input unit.

Chen discloses translating the extracted content from the content-type used by the application such as WML (wireless markup language) or HTML (Hypertext Markup Language) to a content type that can be understood by SMSC (Short Message Service Center) such as text/plain for transmission to the wireless device (col. 8, lines 42-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Chen and Rao and Justice to include converting the markup language document to plain or text document since SMS such as

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text/plain can be sent through a narrowband channel that incurs a very low operating cost to the service providers.

12. As to dependent claim 8, Rao, Justice and Chen disclose an external communication output unit for sending the markup document from said markup document output unit to an external device (Justice, page 3, paragraph [0035]).

13. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao and Justice as discussed in claims 1-3, 6-7, and 17 above, and further in view of Guck, US Patent No. 5,848,415.

14. As to dependent claim 5, Rao and Justice, however, do not explicitly disclose an external communication input unit for inputting an e-mail from outside said apparatus via a communication device, and an e-mail structure analyzer for analyzing a structure of the e-mail from said external communication input unit so as to generate a plain document, and for sending the generated plain document to markup document input unit.

Guck discloses one converter could convert an e-mail message into a text/plain file while another converter could convert a plain/text file to an html (col. 4, line 63 – col. 5, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Guck and Rao and Justice to include



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analyzing a structure of email to generate a plain document and sending it to a markup document input unit. Guck suggests that converting an e-mail message into a text/plain file and/or converting a plain/text file to an html would accommodate formatting requirements of multiple client users.

15. As to dependent claim 9, Rao, Justice and Guck disclose an external communication output unit for sending the markup document from said markup document output unit to an external device (Justice, page 3, paragraph [0035]).

16. Claims 10-11, 14-16, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao and Justice as discussed in claims 1-3, 6-7 and 17 above, and further in view of Brooke et al. (Brooke), US Patent No., 6,748,569.

17. As to dependent claim 10, Rao and Justice disclose wherein said element refinement processing unit includes an element relation analyzer for automatically classifying at least one of the meaningful as a meaningful element, the meaningful element indicating a meaning or attribute of corresponding meaningful words (Justice, page 3, paragraph [0036] and Figure 5: the user create the simple heuristics markup file that describes the relative location of the content elements such as tag <dateline> for date, <title> for title, <copyright> for "copyright 2001 writers syndicate, Inc" line).

To make it clearer, Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that

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specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brooke and Rao and Justice to include associating a meaningful element with each of the meaningful words included in the structured document generated by said syntax analyzer, the meaningful element indicating a meaning of each of the meaningful words so users/authors can organize the customized data structures.

18. As to dependent claim 11, Rao, Justice and Brooke disclose a proper name element processing unit for adding a markup to a proper name element indicating a proper name, and said element relation analyzer initiates operation of said proper name element processing when the meaningful element is determined to be a proper name element (Justice discloses transformation processor (element refinement processing unit) for transforming content items (meaningful words) in a text file into markup file that includes metadata such as tags that are associated with a number of content elements (Figs. 2-3 and pages 1-2, paragraphs [0016]-[0018]).

19. As to dependent claim 14, Rao and Justice, however, do not explicitly disclose a position element processing unit for adding a markup to position element indicating a position, and said element relation analyzer initiates operation of said position element processing unit when the meaningful element is determined to be a position element.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). A person of ordinary skill in the art would acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as position element indicating position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brooke, and Rao and Justice to include adding a markup to position element indicating a position, and said element relation analyzer starts said position element processing unit when the meaningful element is a position element so users/authors can organize the customized data structures.

20. As to dependent claim 15, Rao and Justice, however, do not explicitly disclose a current position estimation unit for estimating a current position corresponding to the position element, and said position element processing unit adds the current position from said current position estimation unit, as a markup, to the position element.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). A person of ordinary skill in the art would

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acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as a current position element indicating current position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brooke, and Rao and Justice to include estimating a current position corresponding to the position element, and said position element processing unit adds the current position from said current position estimation unit, as a markup, to the position element so users/authors can organize the customized data structures.

21. As to dependent claim 16, Rao and Justice, however, do not explicitly disclose an act element processing unit for adding a markup to an act element indicating an act, and said element relation analyzer starts said act element processing unit when the meaningful element is an act element.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). A person of ordinary skill in the art would acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as an act element indicating an act.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brooke, and Rao and Justice to include adding a markup to an act element indicating an act, and said element relation

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analyzer starts said act element processing unit when the meaningful element is an act element so users/authors can organize the customized data structures.

22. As to dependents claims 18-19, Rao and Justice, however, do not explicitly disclose wherein the added content is at least one of a definition, a URI of a stored definition, or explanatory data relating to the attribute and wherein the added content indicates a current position or date associated with the attribute.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). A person of ordinary skill in the art would acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as a definition, a URI of a stored definition, or explanatory data relating to the attribute or even a current position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brooke, and Rao and Justice to include the added content is at least one of a definition, a URI of a stored definition, or explanatory data relating to the attribute and wherein the added content indicates a current position or date associated with the attribute so users/authors can organize the customized data structures.

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23. As to dependent claim 20, Rao and Justice, however, do not disclose wherein the determined attribute is classified as one of the following elements associated with the at least one meaningful word: a proper name element, a position element, a time element and a verb element.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). A person of ordinary skill in the art would acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as a proper name element, a position element, a time element and a verb element.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brooke, and Rao and Justice to include the determined attribute is classified as one of the following elements associated with the at least one meaningful word: a proper name element, a position element, a time element and a verb element so users/authors can organize the customized data structures.

24. As to claim 21, Rao, Justice, and Brooke disclose wherein the added content is obtained from a database entry in the data storage unit associated with the at least one meaningful word (Justice, Figures 4-5, and page 3, paragraph [0036] and Figure 5: the user create the simple heuristics markup file that describes the relative location of the

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content elements such as tag <dateline> for date, <title> for title, <copyright> for "copyright 2001 writers syndicate, Inc" line).

25. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao, Justice and Brooke as discussed in claims 10-11, 14-16, and 18-21 above, and further in view of Ballantyne et al. (Ballantyne), US Patent Application Publication No. US 2001/0044811.

26. As to dependent claim 12, Rao, Justice and Brooke, however, do not explicitly disclose a time element processing unit for adding a markup to a time element indicating a time, and said element relation analyzer starts said time element processing unit when the meaningful element is a time element.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). Thus, it would have been obvious to one of ordinary skill in the art to acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as time element indicating time.

To support this analysis, Ballantyne discloses in Fig. 5 that "time" element indicating time. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ballantyne, Brooke, and Rao and Justice to include adding a markup to a time element indicating a time, and

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said element relation analyzer starts said time element processing unit when the meaningful element is a time element so users/authors can organize the customized data structures.

27. As to dependent claim 13, Rao and Justice, however, do not explicitly disclose a time processing unit for computing a date corresponding to a time element, and said time element processing unit adds the date from said time processing unit, as a markup, to the time element.

Brooke discloses markup language (XML) lets authors markup data with author-defined elements (opening and closing pairs of tags) that specify the nature of the data, and also enables users to create unique tags that identify their information in more meaningful ways (col. 6, lines 4-32). It would have been obvious to one of ordinary skill in the art to acknowledge that the author/user-defined elements (opening and closing pairs of tags) can be anything such as date element indicating date.

To support this analysis, Ballantyne discloses in Fig. 5 that "date" element indicating date. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ballantyne, Brooke, and Rao and Justice to include adding the date from said time processing unit, as a markup, to the time element so users/authors can organize the customized data structures.



### ***Response to Arguments***

In the remarks, Applicant(s) argued in substance that

A) Rao and Justice fails to teach or suggests "performing the markup process of reading each of the meaningful words in the structured document and automatically adding content to the structured document in association with at least one of the meaningful words in order to generate a markup document".

In reply to argument A, Justice discloses a text file contains content elements such as title, author, release date, article body, and other elements distinguishable in a similar manner (pages 2-3, paragraph [0028]). Justice also discloses transformation processor (element refinement processing unit) for transforming content items (meaningful words) in a text file into markup file that includes metadata such as tags that are associated with a number of content elements (Figs. 2-3 and pages 1-2, paragraphs [0016]-[0018]), and the heuristics markup file provides a relative position within the text file and includes a number of data type tags that are associated with a respective content element (page 3, paragraph [0031]) such as heuristics markup file that describes the relative location of the content elements such as tag <dateline> for date, <title> for title, <copyright> for "copyright 2001 writers syndicate, Inc" line shown in Figures 4-5, and page 3, paragraph [0036]).

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B) Brooke does not teach or suggest adding data (content) to a structured document rather than markup tags.

In reply to argument B, Examiner does not use Brooke reference to reject the limitation "adding data to a structure document". Instead, Examiner's used Justice reference to reject this limitation as explained in response to argument A.

28. Applicant's arguments filed 09/12/2006 have been fully considered but they are not persuasive. Please see the rejection and response to arguments above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The examiner can normally be reached on 8:30 am – 5:30 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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